

Development of treatments to improve healing of ischemic wounds

Grant Award Details

Development of treatments to improve healing of ischemic wounds

Grant Type: Inception - Discovery Stage Research Projects

Grant Number: DISC1-10516

Project Objective: To develop an angiogenic proteoglycan mimic that will protect tissue from rapid degradation, and in conjunction with EPCs promote angiogenesis in order to accelerate ischemic wound healing.

Investigator:

Name:	Alyssa Panitch
Institution:	University of California, Davis
Type:	PI

Disease Focus: Vascular Disease

Award Value: \$235,800

Status: Pre-Active

Grant Application Details

Application Title: Development of treatments to improve healing of ischemic wounds

Public Abstract: **Research Objective**

We aim to develop an angiogenic proteoglycan mimic that will protect tissue from rapid degradation, and in conjunction with EPCs promote angiogenesis in order to accelerate ischemic wound healing.

Impact

As a treatment, LXW7-DS-SILY combined with a collagen scaffold and EPCs will accelerate healing of ischemic diabetic foot ulcers and reduce limb amputation and mortality rates of diabetic patients

Major Proposed Activities

- Aim 1. Synthesize and characterize the angiogenic potential of LXW7-DS-SILY
- Aim 2. Quantify the effect of LXW7-DS-SILY and EPCs delivered with a 3D collagen scaffold on ischemic wound repair in a diabetic ischemic wound model

Statement of Benefit to California: We expect that LXW7-DS-SILY combined with a collagen scaffold and EPCs will lead to a novel treatment to accelerate healing of ischemic diabetic foot ulcers, thereby reducing limb amputation and mortality rates of diabetic patients. We further anticipate that the results from the proposed studies will support translational activities to bring this therapy to patients.

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